tax payer to distort his or her actions. Of course, an end-user surcharge is not a perfect lump-sum tax; a household can avoid it by disconnecting from the public switched telephone network. But, as discussed above, a variety of empirical studies have found that the elasticity of demand for subscription is very low.[41] Hence, this near-lump-sum tax would be a desirable way to raise revenues to support universal service subsidies. Similarly, because they show relatively high price elasticities of demand for toll services, empirical studies support the conclusion that it is not sound policy to raise universal service subsidies by taxing toll services.

To get a sense of the efficiency benefits of this approach in comparison with a net revenues tax, AirTouch made preliminary projections of the deadweight loss associated with this approach. These projections show that by using interstate revenues instead of a flat end-user surcharge, the Commission will trigger from one to 12 billion dollars of efficiency losses annually that could otherwise be avoided.[42]

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41 *See* for example, Hausman, Tardiff, and Belinfante, (1993), Crandall and Waverman (1995 at 93), and Frank A. Wolak, "Telecommunications Demand Modeling (Review Article)," *Information Economics and Policy*, at 5, 1993, pp.179-195). As Hausman, Tardiff, and Belinfante discuss, when the subscriber line charge was instituted, many consumer advocates predicted that large numbers of households would drop off the network but, in fact, penetration increased from 91.4 percent in 1984 to 93.3 percent in 1990.

42 The wide range of projected efficiency losses is due in large part to uncertainty about how large the Commission will make the high cost fund.

Moreover, moving from traffic-sensitive contributions raised from toll services to a fixed charge on access lines may increase subscribership. This effect arises because economic theory and empirical evidence indicate that an end user will make his or her decision whether to connect to the network by considering the full set of telecommunications prices (*e.g.*, per-month and per-minute local exchange charges, intraLATA toll, and interLATA toll). Further, any concerns about disconnects are greatly mitigated by the fact that the Commission could choose to exempt low-income consumers from paying the fixed charge. A further efficiency benefit of this approach is that it is competitively neutral because it does not vary by the type of technology or the identity of the carrier.[43]

B. The Commission's Exemption of Internet Service Providers and Local Exchange Carriers

The Commission has taken other actions that wastefully increase the burden of financing universal service programs. In particular, the Commission has totally exempted Internet service providers ("ISPs") from contributing toward universal service support, and largely exempted local exchange providers from the effects of contributions. Simply put, letting these firms escape making contributions to universal service programs means that either there is less money to support universal service or greater burdens are placed on those who do contribute.

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[43] Cf. Calif. PUC, D. 96-10-066, at 183-84.(end-user surcharge is competitively neutral).

The Commission has ostensibly exempted ISPs for the time being because of the arbitrary and ambiguous definitions of "telecommunications carrier" and "information services provider" in the 1996 Act. The Commission observes that ISPs alter the format of information through computer processing applications, while the statutory definition of telecommunications only includes transmissions that do not alter the form or content of the information sent.[44] But this hair-splitting distinction is unwarranted. All telecommunications carriers "alter the format of information" - a facsimile begins and ends its transmission as printed words on paper, but that "format" is altered in the course of transmission. Although Congressional direction would be helpful, the Commission need not hide behind this definitional veil in order to bring ISPs into the fold of universal service contributors.

While the Commission has exempted ISPs from contributing to universal service, both equity and efficiency considerations clearly lead to the conclusion that ISPs and their customers—who tend to have higher than average incomes—should shoulder a share of the universal service tax burden. The principle stated above that broader tax bases are better tax bases continues to apply even when policy options are limited to levying taxes solely on communications consumers and carriers. Letting ISPs avoid contributing to universal service programs means that the tax burdens falling on other contributors is that much greater, and

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[44] *Universal Service Order*, para. 789. The Commission has also begun a *Notice of Inquiry* on ISPs access to the network, and requested comment as to whether ISPs should retain their exemption from per-minute access charges paid by interexchange carriers. See generally "Fact Sheet: The FCC, Internet Service Providers, and Access Charges," www.fcc.gov./Bureaus/Common_Carrier/Factsheets/ispfact.html.

that their economic behavior is that much more distorted by the taxes. This reason alone demonstrates that ISPs should contribute to the fund.

There is another, perhaps even more compelling reason. The traditional argument for funding universal service support out of taxes collected from telecommunications consumers and providers is that they are the ones who benefit from the expanded subscribership to public switched telephone network.[45] New programs being implemented by the Commission will result in billions of dollars being spent to allow public schools and libraries to offer increased access to the Internet. The increased ubiquity of the Internet, and the greater number of participants on it, will benefit other Internet users. For example, a movie studio operating a web site advertising its latest releases will now have an increased audience. The larger audience will encourage other advertisers, businesses and interested parties to use the Internet network, making Internet access subscriptions more attractive (just as a cable TV subscription with 150 channels is more attractive than one with only 50). It follows that ISPs who benefit from these efforts to encourage Internet use should contribute to universal service programs.

Even if no universal service funds were directed specifically at the Internet, ISPs service providers would still benefit from universal service programs. The nation's ubiquitous, well-functioning telephone network serves as much of the physical infrastructure of the Internet. The same logic that leads to the conclusion that other subscribers and providers of these networks should bear the costs of universal service for telephony, also leads

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[45] See, e.g., *Universal Service Order*, para. 805.

to the conclusion that ISPs and their customers should bear the costs of universal service. ISPs should not be exempt from funding a program from which they benefit more directly than do any of the other parties who are contributing today.

The uneven treatment of ISPs relative to other users of the public switched network will create additional problems as ISPs become increasingly competitive with carriers that are forced to pay universal service taxes. Internet providers increasingly have the technical ability to provide their customers with high-quality two-way voice services, and several Internet backbone providers are planning to do so. The Commission believes that the Internet can be a "subsidy-free zone."[46] But ISPs will be competing against interexchange carriers (IXCs) whose rates reflect the fact that their services have to bear subsidy burdens.

This will create economically inefficient incentives to divert traffic from long distance telephony providers to long distance voice-over-IP providers. By using the Internet protocol to place and receive long-distance calls, callers will avoid contributing to universal service, while making use of many parts of the public switched telephone network including local loops, local switching, and intercity fiber trunks. This loss of support will create pressures to reduce universal service subsidies or increase the taxes placed on other providers and

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[46] *See Universal Service Order*, Separate Statement of Chairman Reed Hundt. The "subsidy-free zone" means that Internet services neither "rely on or receive a subsidy." *Id.* But residential dial-up access to the Internet is generally provided through local telephone services for which there are no traffic-sensitive charges even though these calls generate significant costs during peak times. Thus, dial-up Internet services *do receive* the benefits of subsidized local service.

consumers. The latter will, of course, create a downward spiral in support as increasing taxes create ever greater incentives to move to the Internet to avoid them.

The exemption of ISPs from contributing toward universal service is particularly striking—and unfair—in comparison with the treatment of paging companies. ISPs are not required to contribute toward universal service, but paging companies are. This is bad policy and fundamentally unfair. Paging companies are forced to contribute to a fund from which they will never be able to draw, while ISPs can qualify to draw out of a fund to which they do not contribute. Moreover, unlike ISPs, there is no plausible threat that paging companies will capture significant numbers of customers or minutes of use that would otherwise generate needed revenue for the universal service provider or reflect a universal service contribution. Further, to the extent that paging carriers' obligation to contribute is based on the benefits they obtain from network ubiquity,[47] that rationale applies with equal force to Internet providers. The present arrangement is fundamentally unfair and in need of Congressional direction to accomplish meaningful reform.

Like ISPs, the Commission has largely exempted incumbent local exchange carriers (ILECs) from the costs of universal service. While ILECs are of course, "telecommunications carriers," and are assessed a contribution based on their revenues, Commission policies that perpetuate existing subsidy programs effectively insulate ILECs from any revenue displacement. In particular, the Commission found that a competitive market would "lessen

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47 *See Universal Service Order*, para. 805.

the ability of carriers to pass through the costs of their contributions to consumers."[48] Yet the Commission also authorized incumbent LECs to pass through the costs of their contributions in access charges.[49] Incumbent LECs continue to be insulated from what the Commission perceives to be the incentives existing in a competitive market.[50]

Moreover, the Commission determined that the revenues collected to support access to telecommunications services in high-cost areas would in fact be used to *reduce* interstate access charges, at least for non-rural carriers.[51] But ILECs effectively *increase* access charges by their share of the contributions. An ILEC's universal service costs are effectively recovered from the fund, while all other contributors must recover such costs from their end-users. The interrelationship between the Commission's *Access Charge Reform Order* and the *Universal Service Order* adopted the same day, results in simply a "shell game" whereby the costs of existing subsidies are simply moved from one program to another, and then spread across all telecommunications carriers.

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48 *Universal Service Order* at para. 855. Of course, the Commission's premise is entirely wrong: competition drives prices closer to actual costs, and requires carriers to reduce their own costs relative to their competitors. This in fact makes it more difficult for carriers *not* to pass through externally imposed taxes and other costs that are imposed on the industry as a whole.

49 *Universal Service Order* at para. 830.

50 The Commission may have expected to subject the LECs to competition by permitting IXCs to substitute unbundled elements for tariffed interstate access; this competitive option has not developed largely due to events beyond the Commission's control.

51 *See, e.g.*, 47 C.F.R. § 36.601(c); 47 C.F.R. § 54, Subpart D.

While this may prevent significant revenue dislocations for incumbent LECs, it is not likely to have any significant benefit for telephone penetration, and will likely discourage access to toll services or advanced services. This arrangement will simply replace the usage-dampening effect of the implicit subsidies with the usage-dampening effect of having incumbent LECs pass through universal service contributions to interexchange carriers.[52] Preserving the *status quo* may make for political comity, but it makes for bad telecommunications policy.

V. ELIGIBILITY FOR UNIVERSAL SERVICE SUPPORT

Policies governing the services, subscribers, and carriers eligible for universal service play important roles in determining the fairness, efficiency, and effectiveness of universal service programs. There are several important areas in which the Commission should further reform its policies.

A. Service Eligibility

The Commission has not fully and consistently applied its own principles regarding who is eligible under sections 254(e), 254(h)(1), and 254(h)(2) of the Act to receive specific Federal universal service support for the provision of universal service. In light of the efficiency costs of raising subsidies, the Commission should avoid overly broad universal service programs. It follows that the Commission should refrain from taxing telecommunications subscribers to subsidize inside connections for schools and libraries, to

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[52] Since the level of universal service contribution costs is based on revenue, and IXC revenues are earned on a usage-sensitive basis, the net effect is to depress demand for usage.

subsidize residential subscribers for more than one line, or to subsidize single line business subscribers. In each case, the costs of the subsidies outweigh the benefits.

The *Universal Service Order* concluded that since Congress intended universal service mechanisms to support "access" to "advanced telecommunications and information services," "special services," and "additional services," that Congress could reasonably have intended that the Commission include intra-school and intra-library wiring and connections in the "services" to be supported.[53] The Commission's actions notwithstanding, the Commission's reasoning does not support the conclusion that inside wiring or other internal connections to classrooms may be eligible for universal service support.

The Commission elected to proceed pursuant to Sections 254(c)(3) and 254(h)(1)(B), rather than Section 254(h)(2)(B) as the Joint Board did.[54] The language of Section 254(h)(1)(B) refers only to telecommunications services and does not reference "access" to such services, or include any other language that supports inclusion of internal wiring or other elements of physical infrastructure. In fact, while Section 254(c)(3) permits the Commission to designate additional "services" there is no reason to conclude that Congress meant anything other than *telecommunications* services.[55] There is no statement suggesting that Congress

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53 *Universal Service Order*, para. 429.

54 *Universal Service Order*, para. 425.

55 Indeed, it states only that "in addition to the services included in the definition of universal service under paragraph (1), the Commission may designate additional services for such support mechanisms for schools, libraries, and health care providers for purposes of subsection (h)." At the most, Congress intended Section 254(c)(3) to authorize the Commission to designate "telecommunications or information services" as eligible for support.

intended to provide universal services support for inside wiring and other connections. Moreover, a Congressional intent for "access to telecommunications" to include internal connections - a de-regulated service often provided by non-telecommunications carriers - cannot be reconciled with Section 254(h)(1)(B)'s discussion of the "services" of telecommunications carriers, and discount from such carriers' "rates."

The rationale for universal service is that we all benefit from being able to reach one another on the public switched telephone network. While this is an argument for subsidizing targeted households for their primary lines, it provides absolutely no basis for subsidizing second, third, and other additional lines that a household may choose. While the Commission may be concerned that it will be administratively difficult to distinguish between first and additional lines, untested concerns are no reason to waste hundreds of millions of dollars. Mover, if the Commission were to move to the use of means-tested vouchers, there would be natural mechanisms for limiting households to a single subsidy.

AirTouch submits that it clearly is in the public interest not to subsidize second and additional lines. If, however, second lines are going to be subsidized, then two conclusions follow. First, the second-line subsidy amounts should be lower than the primary-line amounts because in many cases a second line triggers relatively little additional cost for the wireline incumbent LEC. Second, if second lines are going to be subsidized, then cellular and PCS subscribers should receive subsidies for their wireless "second" lines. While we doubt that

this is what Congress intended, this policy is the only logical and fair application of the approach the Commission has taken to date.

Turning to business users, even their primary lines should not be subsidized. Business users, unlike residential users, can deduct the costs of telecommunications services from their income taxes, reducing the net cost of these services. Moreover, the choice of business telecommunications services is a commercial decision. If telecommunications services are vital to a business, there is little reason to believe that its owners would not choose to purchase the service.

B. Ensuring that Wireless Providers Truly are Eligible to Provide Universal Service

Many observers of the telecommunications sector believe that wireless local loop holds the most realistic chance of leading to competition in the provision of local switched services to residential and small business subscribers, which was a central objective of the 1996 Act. That competition will not come about, however, if universal service policies are structured in ways that discourage wireless carriers from competing for the subsidies available. As AirTouch explains below, there are two main reasons why wireless carriers, by and large, have not yet found it in their business interests to provide the required package of services and compete for universal service subsidies. Consequently, with two simple steps, the Commission would remove significant disincentives to wireless provision of universal-service-eligible services.

First, even with portable subsidies, the flat-rated unlimited usage structure of existing local exchange services is not suited to wireless carriers' networks, where usage-sensitive costs are much greater. Consequently, the Commission should eliminate any minimum "local usage" component from the required package of services. Where CMRS carriers must compete for customers (and the subsidies that come with them), there is absolutely no incentive to structure a package of services that could somehow "win" the subsidy while "forcing" the consumer to accept an inferior service.[56] Accordingly, it is unnecessary to include a "local usage" minimum in the required service package.

Second, the Commission should issue strong declaratory rulings and take enforcement actions where necessary to preclude CMRS carriers from being subject to regulations preempted by Section 332 and the 1993 amendments to Section 2(b). In particular, the Commission should respond in this proceeding to the Congressional questions concerning the definition of "local exchange carrier" to explain that CMRS carriers who obtain universal service eligibility are nonetheless not "local exchange carriers" for any purpose or under any definition. The preemption of state regulation contained in Section 332 remains in force even where CMRS carriers become eligible for federal and state universal service subsidies.

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[56] AirTouch explained this point at length in its Comments filed in response to the Commission's *Further Notice of Proposed Rulemaking* on cost modeling in CC Dockets 96-45, and 97-160, FCC 97-256 (rel. July 18, 1997). *See* Comments of AirTouch Communications on Section IV (filed October 17, 1997).

As the Commission correctly decided, the 1996 Act provides that state commissions may not impose conditions not in the statute for eligibility to receive federal subsidies.[57] As the Commission further explained, nothing in Section 214(e)(1) requires that a carrier be subject to the jurisdiction of a state commission in order to be designated an eligible carrier. Thus, CMRS carriers and others not subject to the full panoply of state regulatory jurisdiction can be designated as eligible.[58]

Nevertheless, some states have attempted to impose a requirement that AirTouch obtain certification as a CLEC from a state commission as a condition of eligibility to receive universal service support.[59] CMRS carriers are equally concerned that obtaining eligible carrier status could lead to attempts by state regulators to subject AirTouch to rate regulation to declare that CMRS carriers have somehow acquired "local exchange carrier" status. The risks of "local exchange carrier" status are significant costs created by new regulatory burdens

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57 *Universal Service Order*, para. 135. The Commission also made clear that a state's refusal to designate a carrier as eligible on grounds other than the criteria in Section 214(e) is prohibited by Section 253 of the Act. *Id.*, para. 136; *see* 47 U.S.C. § 253.

58 *Universal Service Order* at para. 147. The law is less explicit that states may not impose such requirements as a condition for eligibility to receive state funds. However, Section 254(f) of the Communications Act provides that states may only adopt regulations that are "not inconsistent with the Commission's rules." Regulations which explicitly or effectively preclude carriers who are eligible for support from the federal fund from receiving similar support from state funds are arguably inconsistent with Commission's "competitive neutrality" principle and other universal service rules.

59 *See* "Investigation into the Impact of the Telecommunications Act of 1996 on universal service in Nevada, Docket No. 97-5018," *Notice of Intent to Adopt, Amend, or Repeal Regulation* (October 3, 1997) at 6, Section 2.

that are unnecessary for a CMRS carrier facing competition in every service market.[60] Absent assurance that CMRS carriers can obtain eligible carrier status without becoming subject to these burdens, they are likely to be deterred from seeking eligible carrier status or providing universal service eligible services.

At present, the 1996 Act provides that the term "local exchange carrier" does not include a person insofar as such person is engaged in the provision of a commercial mobile service under Section 332(c), except to the extent that the Commission finds that such service should be included in the definition of such term.[61] Although the Commission has established that CMRS carriers may use their spectrum to provide fixed services, the Commission has not yet provided CMRS carriers with clear guidance as to the regulatory status of such services.[62] In particular, the Commission has not made it clear to CMRS carriers that provision of the package of eligible services may still constitute provision of CMRS, and thereby remain within

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60 ILECs will argue that subsidizing CMRS carriers not subject to the same obligations as ILECs violates the "competitive neutrality" principle and/or undermines the ability to prevent "cream-skimming." At the federal level, this argument was rejected on both legal and economic grounds. *Universal Service Order* at ¶¶133 and 142-44. CMRS carriers face competition for their traditional mobile services and they will face competition as a new entrant provider of universal service eligible services. Consequently, CMRS carriers are simply incapable of the leveraging, cross-subsidy, or other harms LEC regulation is intended to address.

61 47 U.S.C. § 153(26).

62 *See generally* "Flexible Service Offerings in the Commercial Mobile Radio Services," *First Report and Order and FNPRM*, WT Docket No. 96-6, FCC 96-283 (rel. August 1, 1996). In the *Local Competition Order*, the Commission found that CMRS providers should not be treated as "local exchange carriers," that decision was based on the assumption that CMRS providers were not providing fixed services. *See Local Competition Order*, paras. 1004-1005.

the exception to the definition of "local exchange carrier." This regulatory uncertainty is a significant deterrent to provision of universal service eligible services by wireless carriers.

C. Setting Competitive Levels for the Subsidies for which Carriers are Eligible

There is an important area in which the Commission has been headed in the right direction. To serve the public interest, the Commission must ensure that universal service providers receive subsidies no larger than needed. A system under which a carrier is subsidized based on claimed embedded costs overstates the amount to which the universal service provider should be entitled and generates little incentive for cost reduction. Instead, the Commission should implement regulatory schemes that mimic competitive markets wherever possible. Any subsidy payments made directly to carriers should be based on either: (1) proxy cost model estimates of *forward-looking economic costs*, or (2) competitive bidding to be the universal service provider. To date, the Commission has taken steps to develop both approaches, while recognizing that implementation of competitive bidding will have to await the development of meaningful local services competition. It is vital that the Commission not go back on its commitment to these approaches.

VI. THE CHOICE OF REVENUE BASE

The Commission has made an important error regarding the revenue base from which Federal support is derived. The Commission correctly decided that taxes to fund support for rural health care providers, educational providers, and libraries should be levied on both

intrastate and interstate revenues. However, the Commission reached a different, incorrect conclusion with respect to taxes to support high-cost support programs.

The use of an interstate-only tax base for the high-cost support programs gives rise to much higher deadweight losses for any given amount of tax revenue because all of the taxes fall on relatively elastic long distance and wireless services. AirTouch analysis filed with the Commission indicates that by taxing solely interstate revenues to support the high cost fund, the Commission will increase efficiency losses by between $600 million and $5 billion annually.[63] While large, these figures likely understate the deadweight loss because they do not include the negative efficiency effects that arise from the interaction with state universal service taxes. These economic losses, which directly harm the American consumer, far outweigh the political benefits on which the Commission based this decision in the *Universal Service Order.*[64]

The disparities in regulatory treatment of intrastate and interstate telephone services, as well as the exemption of Internet access, dramatize the fact that the political approach to universal service is in need of significant reform. For a time, "universal service" meant that everyone in the country would be able to get service cheaper if they would only sign up with

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63 *See* "Reply of AirTouch Communications, Inc. on Federal-State Joint Board Recommended Decision," in the matter of Federal-State Joint Board on Universal Service, CC Docket No. 96-45, filed January 10, 1997.

64 The Commission stated that the basis for adopting this revenue base is "to promote comity between the federal and state governments," and because states are presently reforming their own universal service programs. *Universal Service Order,* para. 831.

AT&T instead of obtaining service from a competitor.[65] In practice, "universal service" came to be a code word for an unstated (and unproven) assumption that ensuring affordable telephone service in all parts of the country requires massive cross-subsidies from interstate to intrastate services.

This perspective developed because the vast majority of traffic was local. Universal service subsidies were generated through the process of determining what share of costs could be recovered from local rates and which would be recovered from toll - determinations primarily made by state regulators. Consequently, toll rates assumed more and more of the subsidy burden. Unsurprisingly, the inflated rates for toll service encouraged entry by competitive toll service providers, threatening the cross-subsidy plan adopted by the state regulators' convention. This dilemma lead to the 1996 reforms, but the dilemma has not yet been resolved. A good first step would be to eliminate all universal service mechanisms based on jurisdictional separations or other cross-subsidies within the telecommunications industry and raise the needed funds through a general tax on all telecommunications customers.

Here, the Commission is moving in the right direction. Although it has not made all subsidies explicit, it recognized the problem and made some of the subsidies formerly embedded in interstate access charges explicit. Additionally, it is important to note that many of the implicit subsidy mechanisms are either Congressionally imposed or within the discretion

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65 *See, e.g.*, Kellogg, Thorne and Huber, *Telecommunications Law*, (1992) at 12 (1992); Milton L. Mueller, Jr., *Universal Service: Competition, Interconnection and Monopoly in the Making of the American Telephone System* (**BB) (1997), at 4.

of state regulators.[66] The Commission can contribute substantially to meaningful reform by addressing its own policy decisions that generate waste and inefficiency, and by explaining to Congress where the authority or legislative direction to conduct needed reforms is lacking. The interstate/intrastate distinction with respect to the funding base is a good example of an instance where Congress can provide the needed direction so that the Commission can implement the economically efficient result.

Using the interstate/intrastate distinction in universal service funding programs no longer makes sense. In 1998, competitive alternatives for long-distance, and a number of other economic factors, have increased customer demand for interstate services. And, as many universal service proponents argue, telecommunications is important because it in fact erases jurisdictional or geographic boundaries. Thus, we have a wide variety of network communications such as the Internet and wireless communications for whom jurisdictional boundaries are meaningless. If universal service policy is to be responsive to these developments, it can no longer perpetuate artificial distinctions that burden interstate rates with subsidies, while exempting ISPs, local service providers, and their customers from bearing their fair share of the costs.

VII. CONCLUSION

In many important respects, the Commission's implementation of the universal service provisions of the 1996 Act fails to serve the public interest. The result is a public policy that costs tens of billions of dollars with little or no demonstrated effect on the penetration it is

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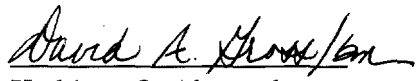
[66] See *Universal Service Order*, paras. 13-14.

claimed to promote. The Commission should begin the process of meaningfully reforming universal service policy so that it effectively promotes penetration, does not impede the development of local service competition, and does not impose wasteful and needless burdens on telecommunications consumers and carriers.

Respectfully submitted,



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